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## EDITOR'S CORNER

Issue number 3 of the *Annals of Economic and Social Measurement* differs from past issues by having longer articles which examine in great depth several methodological problems: statistical inference in time series analysis, criteria for the evaluation of econometric models, and techniques for creating "synthetic" microdata sets. The Board of Editors has a flexible policy with respect to the length of articles, particularly when the research is provocative or innovative. A paper with a single theme published in its entirety is more useful to the research community than if it is split into several related papers which are then published in journals of varying degrees of availability or with relatively small audiences. We want the *Annals* to serve as a focal point for new developments in measurement and computer applications; the articles in this issue illustrate how advances in the social and managerial sciences occur in different formats and contexts.

In the lead article, *Benoit Mandelbrot* presents a critique of common statistical methods of time series analysis—particularly correlation. He promotes R/S analysis as an alternative technique since it permits one to escape from various kinds of dependence observed in time series data. To the extent that non-periodic cycles exhibited by economic and social data are like those of fractional noise, the technique should have wide applicability in research. Some of the work he describes has been supported by the National Bureau of Economic Research, although he has been developing the ideas for several years.

The second paper attempts to develop a "clear and accepted analytical basis for the selection of proper criteria for model evaluation." The primary emphasis is on operational procedures for single or cross-model evaluations of time series models. This paper has nine authors. This cooperative effort reflects the complexity of present-day models, since different aspects require specialized talents. With a single paper, we have avoided a series of comments scattered throughout the literature. This collaboration was made possible through a grant to the NBER from the National Science Foundation; the grant funded a Conference on Econometrics and Mathematical Economics, consisting initially of eight seminars which addressed topics in this area. The seminar meetings generated papers and informal memoranda which were integrated into a final paper, an earlier draft of which was presented for critical review at the Brookings Model Conference, February 11-12, 1972. *Saul Hymans* and *Harold Shapiro* served as co-chairmen of the seminar; the final form of the article reflects their guidance of the seminar.

When there is still fundamental disagreement regarding a particular problem in research, an article and a series of comments on it can serve to more clearly define the major issues and point towards avenues of possible resolution. In this case, a paper on match-merge techniques was presented at the NBER Workshop on the Use of Microdata in Economic Analysis. *Benjamin Okner* describes the methodology used to obtain an artificial sample from two samples, each having certain variables (X); one sample, from IRS, had another set (Y), and the second sample from SEO had a third set (Z). In his comment, *Christopher Sims* presents a theoretical analysis which is critical of the procedures used to obtain the (X, Y, Z)

sample. He notes that in effect Okner has postulated a regression function relating the variables and that problems arise from defining groups in certain ways. *Jon Peck* observes that explicit specification of the joint distributions is an enormous task, and that the uses to be made of the resulting sample have to be considered before concluding that the match-merge procedures are invalid. *Edward Budd* contrasts Okner's procedures with those used by the Office of Business Economics: he makes specific reference to sampling differences, matching procedures, and the treatment of underreporting of income. Okner, in his response, describes how the research tool has been used: he stresses that the final test is how useful the data base proves to be for tax analysis. It is doubtful whether the last word has been heard on this important topic of such critical importance in economic and social analysis.

The theory of human capital has many known and unknown gaps requiring new data and improved conceptual frameworks. *Paul Taubman* and *Terence Wales* examine the "effects of omitting mental ability on both the shape of the age-earning profile, and on the differences between profiles." They conclude that a whole set of corrections are necessary to obtain unbiased estimates of the returns to education. Their note is part of the on-going research effort at the NBER on the determinants and effects of human capital formation.

The note by *William Tyler* serves as an extended announcement of the Latin American Data Bank at the University of Florida. The acquisition priorities described in the note illustrate the types of choices facing all data libraries. This note is one of a continuing series on data banks and computer centers around the country.

The next issue of the *Annals* will be devoted to papers on control theory presented at a workshop sponsored by the Conference on the Computer in Economic and Social Research. In the current issue, there is an announcement on the Charter Meeting of this conference which will be on the Current Population Survey. Persons interested in the activities of the new conference series should contact Neville Beharie, Assistant Editor of this journal.

In the Editor's Corner of the April 1972 issue of the *Annals of Economic and Social Measurement*, it was reported that the Conference on the Role of the Computer in Economic and Social Research in Latin America held in Cuernavaca, Mexico, October 25-29, 1971, was funded by the National Science Foundation and IBM. Although it is true that this conference was one of the series of NBER conferences and workshops on the role of the computer in economic and social research supported by the National Science Foundation and IBM, in this specific case special funding provided by the IBM World Trade Corporation, together with resources provided by the sponsoring organizations—NBER, Colegio de Mexico, Vargas Foundation and the DiTella Institute—fully supported the conference. A grant to provide the necessary support for continuing workshops on this general topic in Latin America over the next five years has also been made by the IBM World Trade Corporation.

S.V.B.